

spoke w/ Turco they do not
have 4L Etchant they carry 11L Etchant
perhaps the same (4L = 11L)

3855 Lakewood Blvd.
Long Beach, CA 90846
Mail Code 126-14
(213) 593-4233

07/01/1986

TURCO PRODUCTS, INC.
P.O. BOX 6200
CARSON, CA
835-1391

Dear Sirs,

In order for Douglas Aircraft Company to comply with the provision set forth in Title 8, Section 5194 - Hazard Communication - of the General Industry Safety Orders, the Material Safety Data Sheet for the following product produced and sold by your company is requested. In replying to this request, please use our DPM or DMS number so that we may properly identify your product for new files.

Douglas Part No.: DMS 1863 REV. A
Your Product: ETCHANT 4L

A complete list of hazardous ingredients must be provided so that we may take appropriate action.

The information on these Material Safety Data Sheets (MSDS) will be used to inform our employees of the hazardous ingredients and to train them in the proper methods of handling the product.

As set forth in the General Industry Safety Orders, Title 8, failure to comply with this request within 25 working days will result in the forwarding of a copy of this letter to the Director, Department of Industrial Relations, State of California.

We would like to thank you in advance for your anticipated speedy cooperation in this matter. If you have any questions regarding this request, please feel free to call on us. We will be happy to assist you. Please return a copy of this request with the MSDS.

Turco does not have
this Product

Yours truly,

John
McMillan

DOUGLAS AIRCRAFT COMPANY

Dms 1863

4110-550-4

TURCO PRODUCTS **MATERIAL SAFETY DATA SHEET**

HAZARD RATING		Fire	Reactivity
4 = EXTREME		1	
3 = HIGH		3	2
2 = MODERATE			
1 = SLIGHT	Toxicity		Special
0 = INSIGNIFICANT			
* = CHRONIC HEALTH HAZARD - SEE SECTION V			

not right type

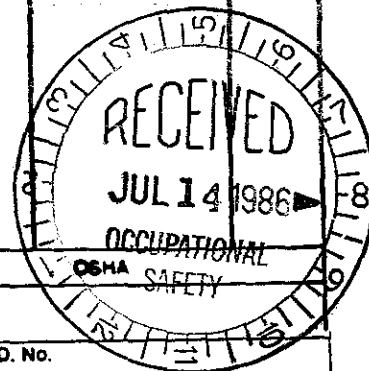
SECTION I — PRODUCT NAME: Turcoform Etchant 11L

ISSUE DATE: 11/4/85

Manufacturer's Name: **TURCO PRODUCTS**
 Address: **24600 So. Main Street, Carson, CA 90749**
 Emergency Telephone No.: **(213) 634-3300**

SECTION II — HAZARDOUS INFORMATION:

COMPONENTS	C.A.S. Number	CERCLA NO. SPILL #	RCRA Waste #	ACGIH TLV	OSHA TWA	% WT.
Sodium Hydroxide	1310-73-2	1000	D002	2mg/m ³ skin	2mg/m ³ skin	20
Sodium (sulfide, polysulfide thiosulfate)	1344-08-7	Nt. Lstd	NtLstd	Nt. Estab.	Nt. Estab.	20
CARCINOGENS		NTP	IARC	HAZARD CLASS		
None		N. Apl.	N. Apl.	N. Apl.		
PROPER SHIPPING NAME:		HAZARD CLASS		HAZARD I.D. No.		
Corrosive Liquid NOS		Corrosive		UN 1760		



SECTION III — PHYSICAL DATA:

BOILING POINT, °F: 225°F		SPECIFIC GRAVITY: 1.369
VAPOR PRESSURE (mmHg):	Approx. 16mm	VOLATILE, % BY VOL: Approx. 75%
VAPOR DENSITY (AIR = 1):	Over 1	EVAPORATION RATE (Bu. Ac. = 1): Less Than 1
APPEARANCE AND ODOR:		SOLUBILITY IN WATER: Complete
Dark Amber Liquid, Sulfurous Odor		pH 13-14

SECTION IV — FIRE AND EXPLOSION HAZARDS:

FLASH POINT AND METHOD USED:
Nonflammable - Not applicable
EXTINGUISHING MEDIA:
Not applicable
SPECIAL FIRE FIGHTING PROCEDURE AND PRECAUTIONS:
Use self-contained respiratory protection.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Contact with reactive metals, such as aluminum, zinc, tin, etc., may lead to generation of hydrogen gas in explosive amounts. Exposure to high heat; under fire conditions, may lead to generation of toxic hydrogen sulfide gas.

SECTION V — EMERGENCY, FIRST AID AND HEALTH INFORMATION:

EFFECTS OF OVER EXPOSURE: EYES: Contact with product or product solution will cause severe burns; possible permanent tissue damage and possible blindness.
SKIN: Contact with product or product solution will cause severe irritation, possible chemical burns and possible permanent tissue damage.
INHALATION: Inhalation of mist will cause severe irritation and possible permanent damage to upper respiratory tract.
INGESTION: Severe irritation, possible permanent damage to gastrointestinal tract, may be harmful or fatal if swallowed.
MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED:
None known

FIRST AID: EYES: Speed is essential. Immediately begin flushing eyes with large volumes of water. Continue for at least 15 minutes. Hold lids apart to assure contact with all surfaces. Obtain medical attention.

SKIN: Flush affected area with large volumes of water. Continue flushing until "slippery" feel is completely gone, at least 15 minutes. If irritation is evident or blistering occurs, obtain medical attention.

INHALATION: Remove to fresh air. Administer oxygen if breathing is difficult. Obtain medical attention if irritation persists.

INGESTION: Do not induce vomiting except on advice of qualified medical personnel. If victim is conscious, dilute by giving large volumes of milk or water. Obtain immediate medical attention. Never attempt to induce vomiting or give anything by mouth to an unconscious person.

PRIMARY ROUTES OF ENTRY: INHALATION ☒ SKIN CONTACT ☒ OTHER _____

SECTION VI — REACTIVITY DATA:

STABILITY: STABLE ☒ UNSTABLE _____ HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS TO AVOID:

Contact with strong acids, reactive metals, organic materials

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic hydrogen sulfide gas, sulfur oxides and acid gases

SECTION VII — SPILL, LEAK AND DISPOSAL PROCEDURE:

SPILL OR RELEASE PROCEDURE: CONCENTRATE: Confine spill. Stop leak at source if this can be done safely. Ventilate area. Evacuate nonessential personnel. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT-approved drums for disposal. Wash area with water. Collect washings and place in DOT-approved drums. Keep spill and washings from entering sewer or waterways.

USE SOLUTION: As for concentrate

DISPOSAL INFORMATION: CONCENTRATE: (1) Transfer to reclaiming center for recycling or reuse, if possible. (2) Transfer to licensed hazardous waste treatment or disposal site for disposition under applicable local, state and regional regulations as hazardous waste.

SPENT SOLUTION AND RINSES: Dispose per (1) or (2) above, or rinses can be treated with an oxidizing agent to eliminate sulfide, and neutralized to precipitate dissolved metal. Check to be sure all sulfide is eliminated before neutralizing to prevent generation of toxic hydrogen sulfide gas. Floatable soil may also be separated. Residual organic matter may be removed by oxidation and/or carbon treatment. Clarified water may be released to sewer if local regulations permit.

SECTION VIII — SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION: For mist conditions, a NIOSH-approved respirator for mists is advised. If respirators are used, a formal training and screening program must be initiated. See 29 CFR 1910-134.

VENTILATION:

Maintain sufficient mechanical ventilation to keep concentration below TLV.

PROTECTIVE EQUIPMENT: CHEMICAL FACE SHIELD OR GOGGLES: ☒

GLOVES ☒ BOOTS ☒ APRON ☒ PROTECTIVE SUIT ☐ Not normally required

GLOVES, BOOTS, APRON AND SUIT MADE FROM: Alkali resistant neoprene

RECOMMENDED PERSONAL HYGIENE: Wash hands and face with soap and water before smoking or eating. Immediately remove all contaminated clothing. Launder before reuse. Discard contaminated shoes.

SECTION IX — OTHER INFORMATION:

SPECIAL PRECAUTIONS — STORAGE AND HANDLING: Store in dry protected area. **CAUTION:** Hazardous carbon monoxide gas can form upon contact with food and beverage products. This can collect in enclosed spaces and can be fatal. Follow appropriate tank entry procedures (See ANSI Z117-1-1977). Personnel entering such areas must be provided with respiratory protection and a safety line. They should be kept under observation while in the area by another man at a safe distance. **MIXING:** Add slowly to luke warm water while mixing. Never dump large amounts into water - violent steam eruption may occur. Make additions to in-use tank slowly and cautiously.

REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT: Relieve any pressure. Cover openings to avoid splashing. Clean exterior and interior by flushing with water. Collect flushings for disposal. Use protective equipment for eyes, skin and inhalation.

DATE PREPARED:

DATE REVIEWED:

bb 11/4/85

TMSDS 3-385

BOE-C6-0189047